Building a Profession through a Learning to Teach System*

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www.scienceandliteracy.org

*Callahan, M., Benson-Griffo, V., & Pearson, P. D. (2009). Teacher knowledge and teaching reading. In F. Falk-Ross, S. Szabo, M. B. Sampson, & M. M. Foote (Eds.), *Literacy issues during changing times: A call to action, 30th yearbook of the College Reading Association* (pp. 37-62). Logan, UT: College Reading Association.
Available at www.scienceandliteracy.org

Differences between Andrea's talk and mine

- Andrea:
  - Lean and Mean
  - A few guiding principles
- Mine:
  - Not so lean; maybe still pretty mean
  - Kitchen sink approach

We have much to celebrate

An accreditation system that is the envy of the nation.

CTC

COMMISSION ON
TEACHER CREDENTIALING
Ensuring Educator Excellence

SB 2042
Multiple
Subject and
Single
Subject
Preliminary
Credential
Program
Standards

Commission on Teacher Credentialing
January 2009

A credentialing system that has a high level of rigor and integrity

Teaching Reading Language Arts in a Multiple Subject Assignment

Teaching Mathematics in a Multiple Subject Assignment

Teaching Science in a Multiple Subject Assignment

Teaching History-Social Science in a Multiple Subject Assignment

TPE 1B: Subject-Specific Pedagogical Skills for Single Subject Teaching Assignments

Teaching English-Language Arts in a Single Subject Assignment

Teaching Mathematics in a Single Subject Assignment

Teaching Science in a Single Subject Assignment

Teaching History-Social Science in a Single Subject Assignment

B. Assessing Student Learning

TPE 2: Monitoring Student Learning During Instruction

TPE 3: Interpretation and use of Assessments

C. Engaging and Supporting Students in Learning

TPE 4: Making Content Accessible

TPE 5: Student Engagement

TPE 6: Developmentally Appropriate Teaching Practices

TPE 6A: Developmentally Appropriate Practices in Grades K-3

We even have a TPE for continued professional growth

TPE 13: Professional Growth

Candidates for a Teaching Credential evaluate their own teaching practices and subject matter knowledge in light of information about the state-adopted academic content standards for students and student learning. They improve their teaching practices by soliciting feedback and engaging in cycles of planning, teaching, reflecting, discerning problems, and applying new strategies. Candidates use reflection and feedback to formulate and prioritize goals for increasing their subject matter knowledge and teaching effectiveness.

A first rate induction system

Induction Program Standards
Adopted June 2008

Preconditions
Adopted August 2008

Updated Common Standards
Adopted November 2008

An approach to teacher credentialing assessment that others only dream about

CALIFORNIA TEACHING PERFORMANCE ASSE

CalTPA

Preservice Performance Assessment and Teacher Early Career Effectiveness: Preliminary Findings on the Performance Assessment for California Teachers

R PREPARATION PROGRAMS TO

OR THE CalTPA
day TPA Foundations and Orientat
specific training for each of the fou
mission also offers Lead Assessor tra
qualified Lead Assessors to provid
, institutions, and regions.

A profession that takes itself seriously

Context

- For a decade, we have been implementing a high profile, high demand Learning to Teach System
- Time to take stock
- Time to think about next steps
- Time to think about raising the bar even higher than we have.

Why would we want to raise the bar

- When a profession is under durress, it can either
  - Crumble in response to the pressure
  - Or
  - Stand up and be counted
- We need to take the high road.
- Our nation, voters, parents, and students deserve a system they don't even know they want

Continuum of Teaching Practice

Levels of Teacher Development Across the CSTP

CSTP	Emerging Level 1	Exploring Level 2	Applying Level 3	In...
Engaging and Supporting All Students in Learning	Expands awareness of curriculum and instructional practices to support understanding and engage students in learning.	Explores use of additional instructional practices to teach the curriculum and support student understanding and engagement.	Implements the curriculum using a variety of instructional practices and supplemental resources selected to improve student understanding and engagement.	Integrat... knowle... instruct... and su... resourc... and de... underst... engager...

Element		Emergi...
2.1 **Promoting social development and responsibility within a caring community where each student is treated fairly and respectfully** *Evidence:*		Models and communicates expectations for fair and respectf... behavior to supp... social developme...

	Emerging Level 1	Exploring Level 2	Applying Level 3		
Developing as a Professional Educator	Works collaboratively with assigned colleagues to reflect on and improve teaching practice and student success.	Seeks collaboration with colleagues, resource personnel, and families to reflect on ways to improve teaching practice and student success.	Collaborates and reflects regularly with colleagues to improve teaching practice and student success.	Analyzes and integrates information from a wide range of sources to expand skills of collaboration and reflection as a habit of practice and to impact teacher effectiveness and student learning.	Engages in and facilitates collaborative learning communities focused on providing quality instruction and optimal learning for the full range of students.

My agenda

- Present my model of professional growth over time
  - An evolving version of a developmental view of teacher knowledge, skills, and dispositions
- Raise some nagging issues about assessing teacher growth, especially knowledge
- Look in another place: Talk about some successful models and principles of teacher education, particularly professional development
  - Models that promote the development of professional knowledge, skills, and dispositions

Why should we worry about teacher knowledge?

- The moral imperative: It is the solemn responsibility of any profession to monitor the professional knowledge of its members
  - It is precisely the "deal" professions make with our society
- The empirical claim: It matters. It makes a difference in teacher practice and student achievement.
  - Teachers who know more teach better and their kids learn more.
- The counterfactual: Maybe it doesn't???
- We'll examine these issues in more detail.

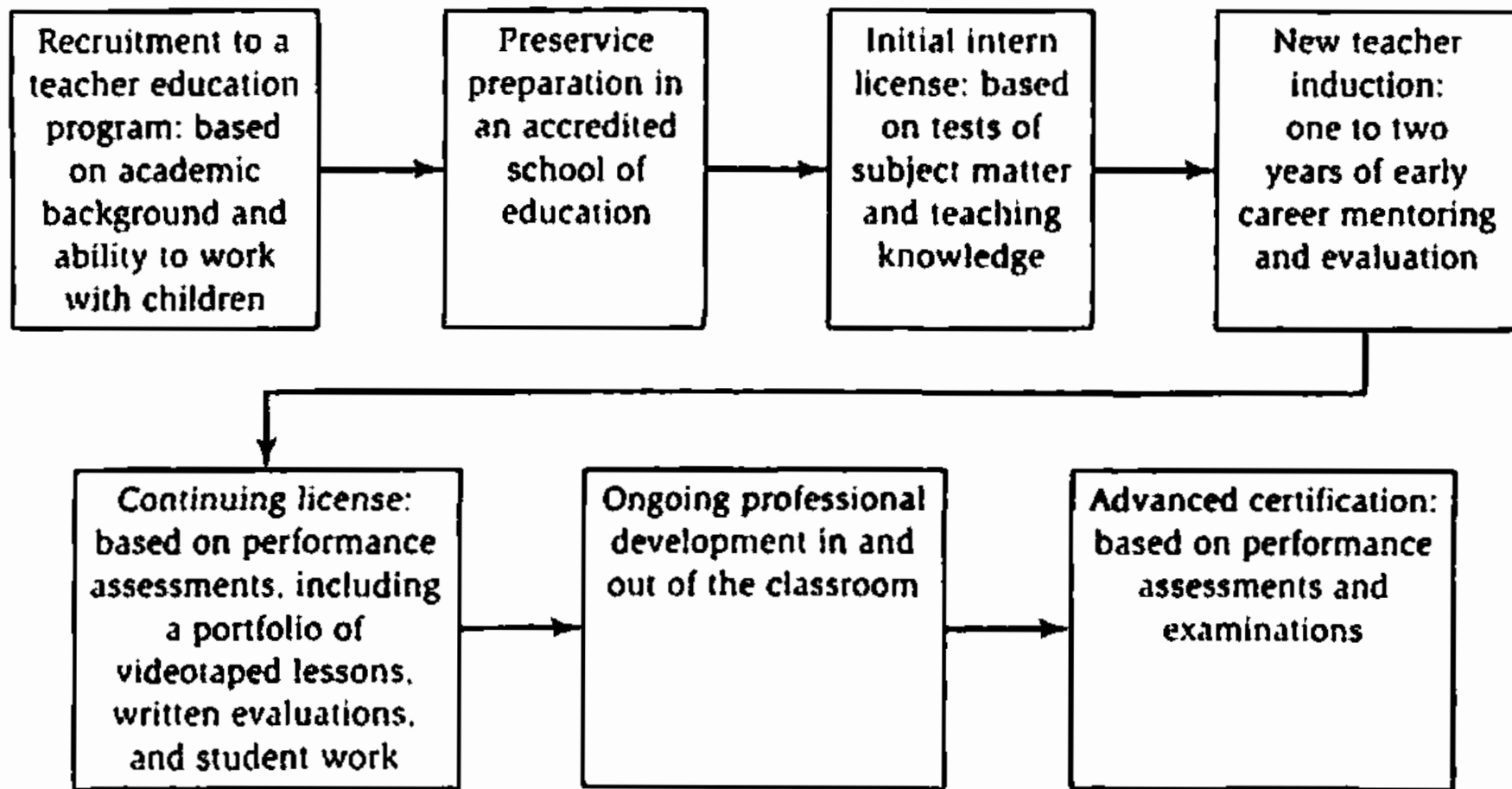# What would it mean to privilege and monitor teacher knowledge? What would we monitor? What would we assess?

- Declarative: What?
- Procedural: How?
- Conditional: Why and when?
- All three: Why, when, and how do we teach what?

What would it mean to have a theory of teacher knowledge development over time?

- What is it that develops?

- How does it change over time?

- How would you know it was changing?

- What difference would it make whether and if it changed?

| Recruitment to a teacher education program: based on academic background and ability to work with children | → | Preservice preparation in an accredited school of education | → | Initial intern license: based on tests of subject matter and teaching knowledge | → | New teacher induction: one to two years of early career mentoring and evaluation |

| Continuing license: based on performance assessments, including a portfolio of videotaped lessons, written evaluations, and student work | → | Ongoing professional development in and out of the classroom | → | Advanced certification: based on performance assessments and examinations |

Figure 6.1. A Continuum of Professional Development

Source: Adapted from a document prepared jointly by the National Council for Accreditation of Teacher Education, the Interstate New Teacher Assessment and Support Consortium, and the National Board for Professional Teaching Standards by removing their labels for the various tests and standards.

Official accounts tend to emphasize procedures and stages
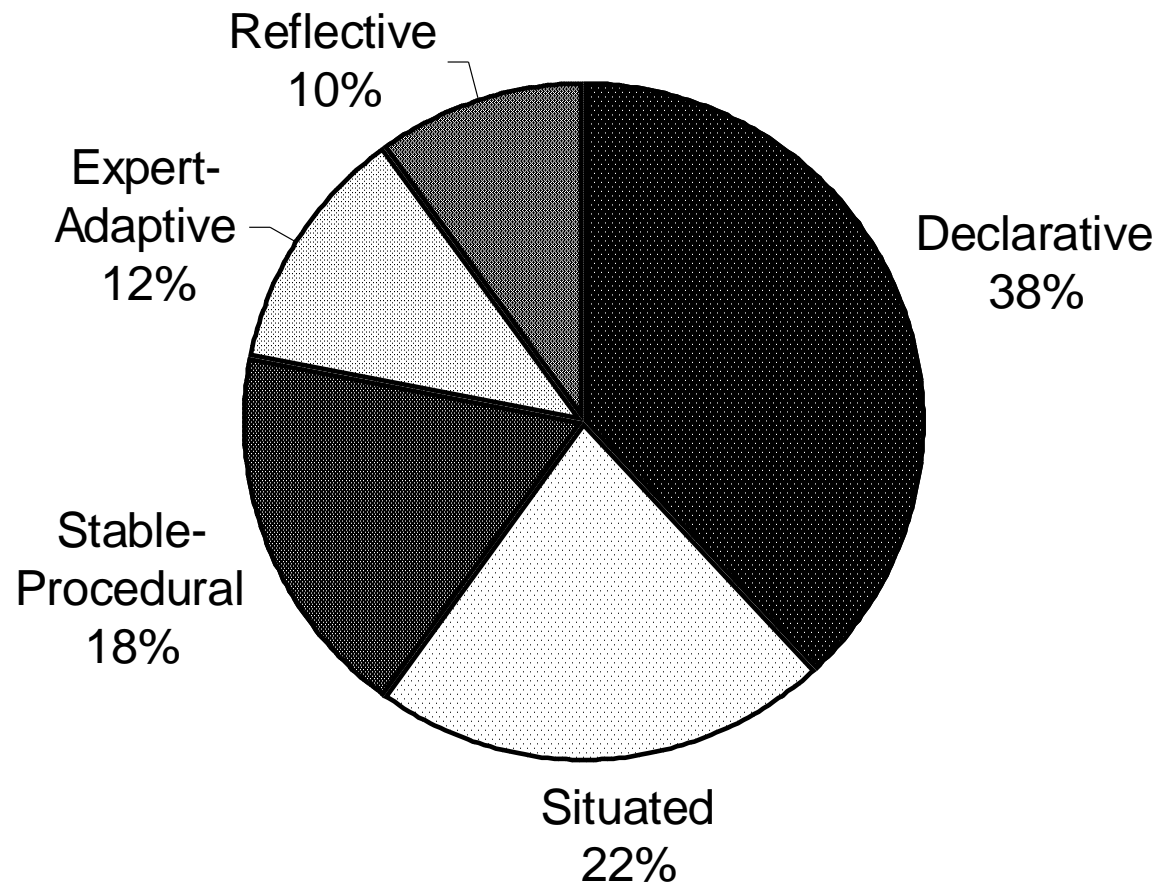
National Academy of Education

- The Knowledge Base for Teaching Reading, Snow et al

- *Chapter 6: A model of professional growth in reading education, Pearson & Cervetti*

- Ancillary to the Darling-Hammond-Bransford volume, *Preparing Teachers for a Changing World*.
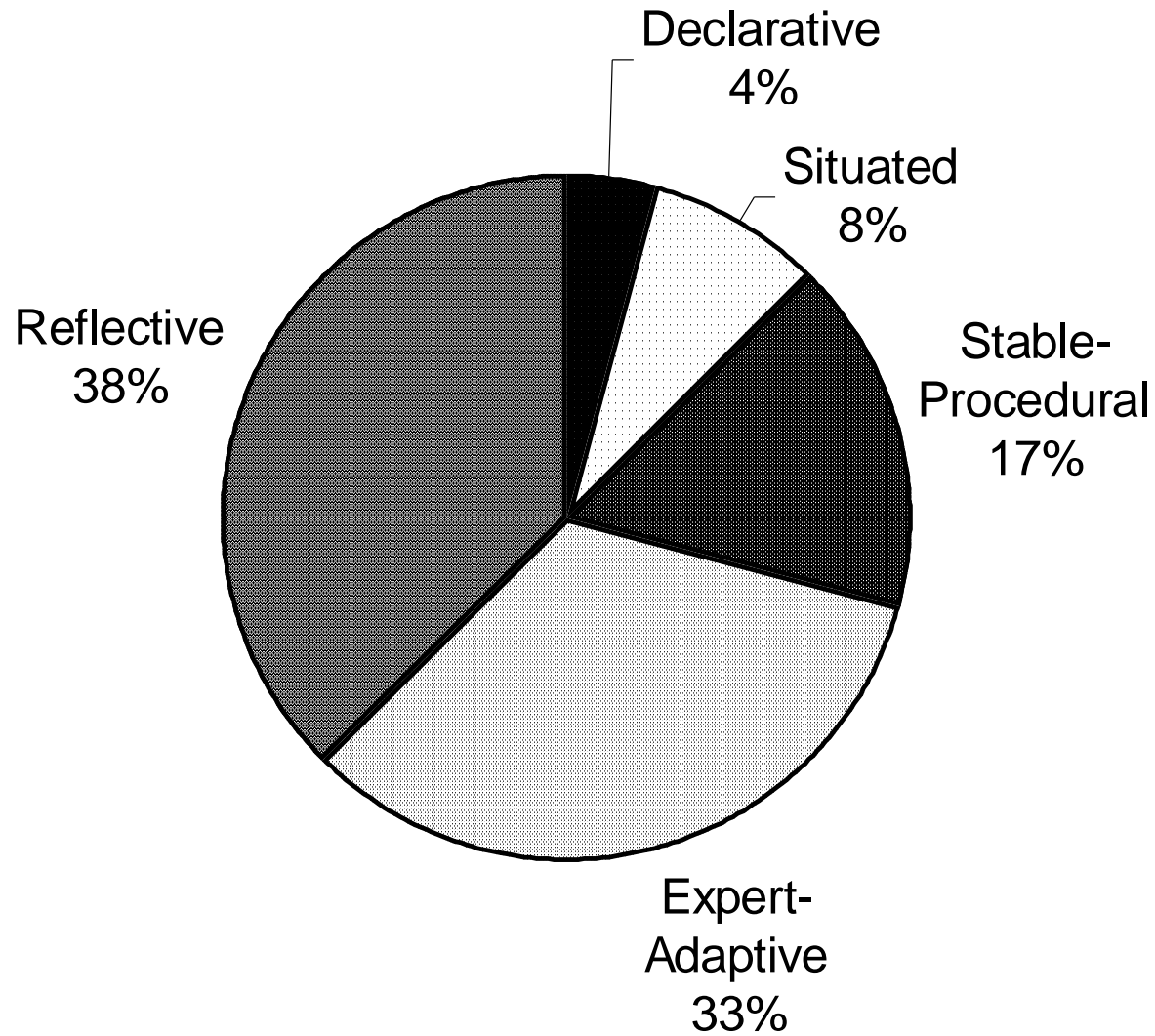
Snow et al's Continuum of Knowledge

- **Declarative knowledge.**
  - knowing what
- **Situated, can-do procedural knowledge.**
  - knowing how but highly <u>strategic</u> in application
- **Stable procedural knowledge**.
  - Knowing how but <u>routinized</u>, almost automated
- **Expert, adaptive knowledge**.
  - Knowing how, why, when, with whom, and under what conditions (conditional)
- **Reflective, organized, analyzed knowledge**.
  - Knowing it all, where the pot holes are, what needs fixing, what keeps you up at night.
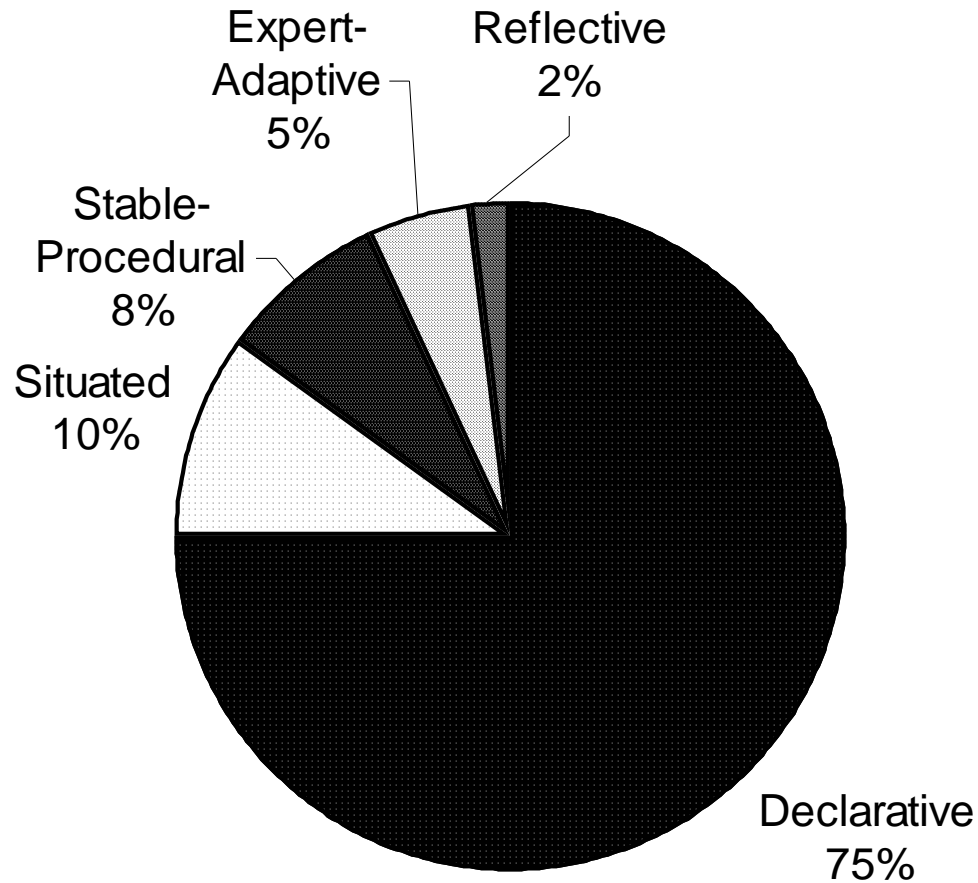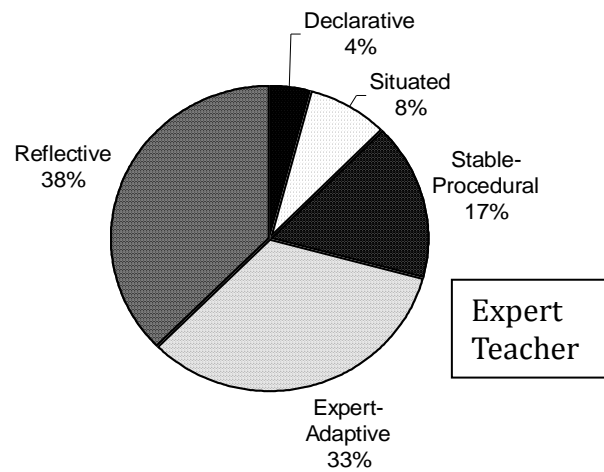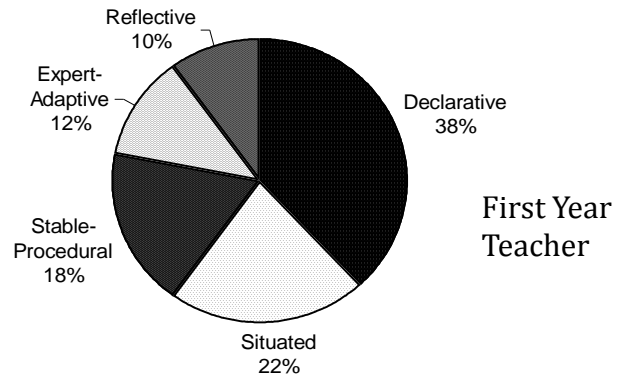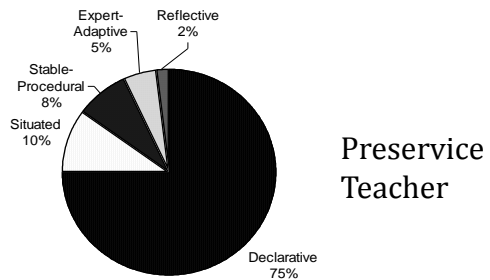
Distribution of Knowledge for a typical student in a traditional pre-service program

Reflective
10%

Expert-
Adaptive
12%

Declarative
38%

Stable-
Procedural
18%

Situated
22%

First year teacher

Declarative
4%

Situated
8%

Stable-
Procedural
17%

Reflective
38%

Expert-
Adaptive
33%

Expert veteran teacher

Preservice
Teacher

Expert-
Adaptive
5%

Reflective
2%

Stable-
Procedural
8%

Situated
10%

Declarative
75%

First Year
Teacher

Reflective
10%

Expert-
Adaptive
12%

Stable-
Procedural
18%

Situated
22%

Declarative
38%

Expert
Teacher

Declarative
4%

Situated
8%

Stable-
Procedural
17%
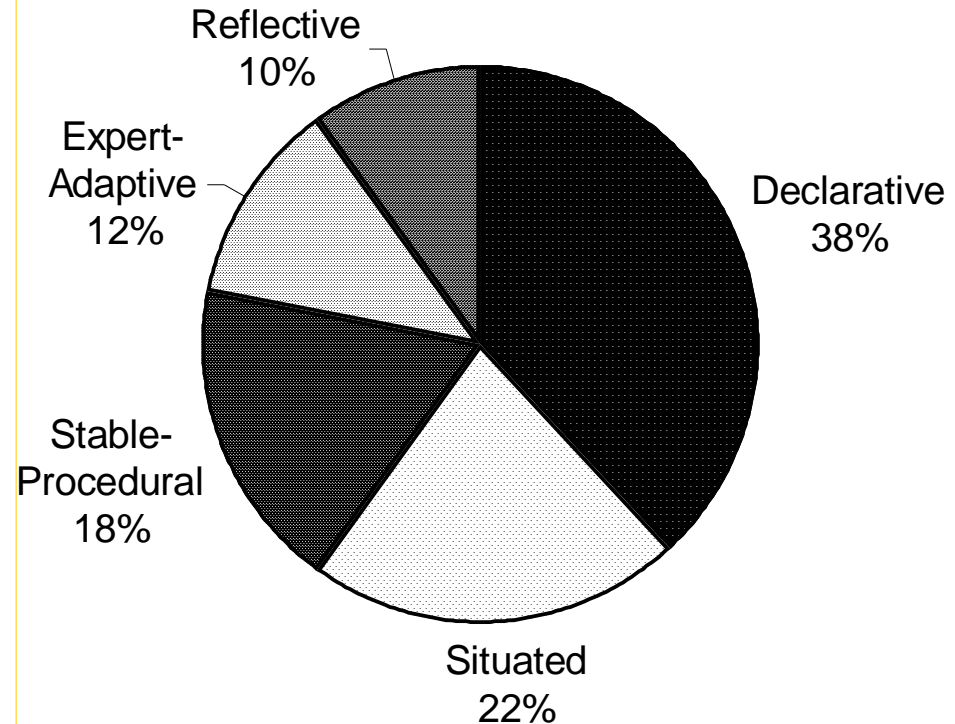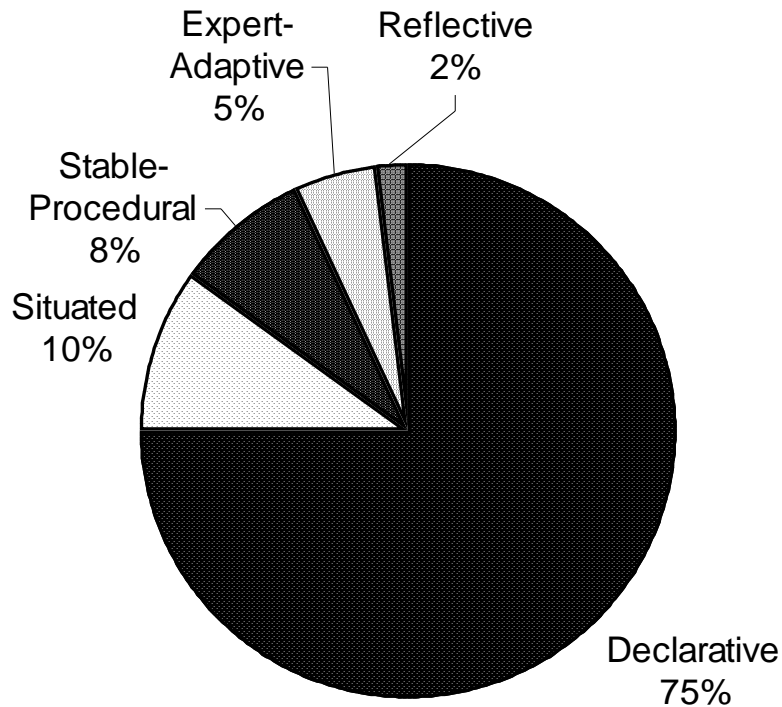
Reflective
38%

Expert-
Adaptive
33%

The pie should get bigger over time, no matter how the types of knowledge are distributed.
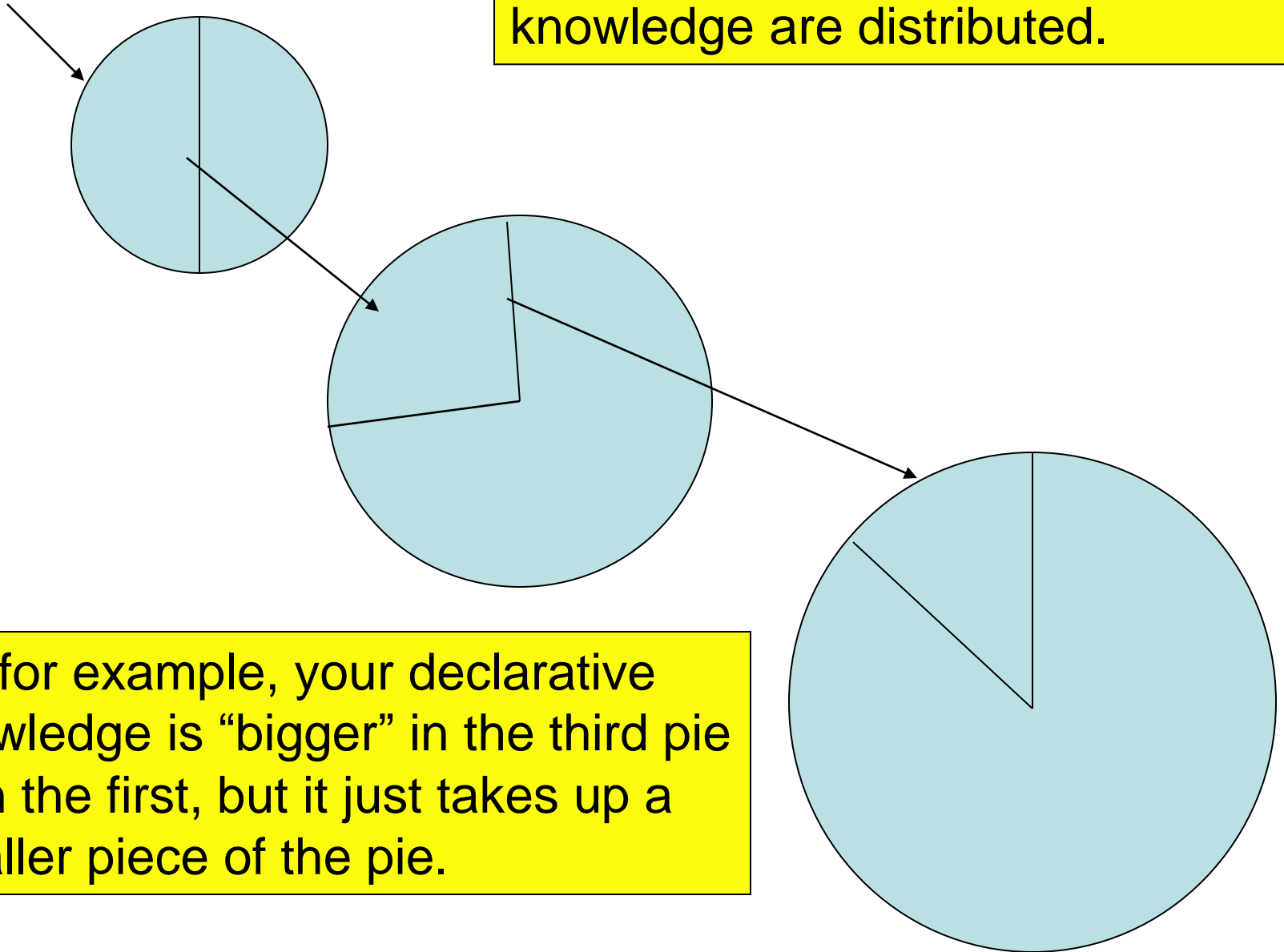
So, for example, your declarative knowledge is "bigger" in the third pie than the first, but it just takes up a smaller piece of the pie.

Expert-Adaptive 5%
Reflective 2%
Stable-Procedural 8%
Situated 10%
Declarative 75%

Reflective 10%
Expert-Adaptive 12%
Stable-Procedural 18%
Situated 22%
Declarative 38%

Course→Student Teach

Field Based

Teacher knowledge varies as a function of program emphases, even at the novice level

Reflective

Expert-Adaptive

Stable-Procedural

Situated-Procedural

Declarative

There are dependencies among knowledge types. Probably layered as in archeological digs.

Table 6.1: Changes in teacher knowledge across a career pathway: phonemic awareness

Type of Knowledge	What Phonemic Awareness knowledge might look like?
Declarative knowledge	Teachers would know that a phoneme is a basic unit of sound, that it is different from a syllable, and that in English the match to graphemes is uneven. They would know that phonemic awareness is a sub-category of phonological awareness, and that the capacity to blend phonemes together to make words and to segment words into constituent phonemes is a key understanding for kids to possess early on.
Situated, can-do procedural knowledge	Teachers would possess at least a few routines for assessing phonemic awareness (e.g., blending, segmentation, elision) and a few routines for engaging kids in its application (e.g., rhyming games, elision tasks, alliteration tasks). As teachers implement the routines, they would likely consult guidelines or manual regularly. The lessons (or assessment protocols) would appear to be relatively rigid and pre-packaged as they are enacted. Teachers would require experiences or a mentor to make adaptations.
Stable procedural knowledge	At this level, the routines have _____ and they are beginning to _____ for ___ groups and individuals _____ to _____ of phonemic _____ se _____ e _____ ch _____ ca ___ te _____ ne R ___ m ___ th _____ y _____ e e ___ st __ hen words ...
Expert Adaptive Knowledge	___ have c _____ h _____ nt PA _____ l i _____ v _____ of _____ th _____ li ___ s __ ere _____ er _____ sta _____ pment sessions on how ____ h ____ PA ___ erent ways.
Reflective, organized, analyzed knowledge	... fle __, organized, and analyzed knowledge, they can _____ ns and assessments critically, with an eye toward predicting _____ programs are likely to be successful with different populations of students. They might well be involved in a district-wide committee to develop a professional development program for improving PA instruction.

How knowledge changes in a domain

Declarative

- Teachers would know that a phoneme is a basic unit of sound, that it is different from a syllable, and that in English writing the match to graphemes is uneven.

- They would know that phonemic awareness is a sub-category of phonological awareness,

- and that the capacity to blend phonemes together to make words and to segment words into constituent phonemes is a key understanding for kids to possess early on.

Situated Can Do Knowledge

- Teachers would possess at least a few routines for assessing phonemic awareness (e.g., blending, segmentation, elision) and a few routines for engaging kids in its application (e.g., rhyming games, elision tasks, alliteration tasks).

- As teachers implement the routines, they might still consult guidelines or a manual regularly.

- The lessons (or assessment protocols) would appear to be relatively rigid and pre-packaged as they are enacted.

- Teachers would require expert scaffolding from a mentor to make adaptations.

Stable Procedural Knowledge

- At this level, the routines have become more or less automatic for the teachers, and they are beginning to be able to adapt to the performance needs of different groups and individuals.

- The repertoire of routines for teaching different aspects of phonemic awareness (e.g., blending, segmentation, elision) have expanded and some differentiation….

- The teacher sees connections between steps in the PA program adopted by the school and the kinds of PA performance exhibited by students when they are asked to spell words "the way they sound" during writing time.

Expert Adaptive Knowledge

- Teachers at this level have come to see the strengths and weaknesses of different PA programs (both formal and informal).

- They know which programs fit the needs of different sorts of students.

- They can reconcile conflicting results from different approaches to PA assessment.

- They can conduct staff development sessions on how to administer PA tests and how to teach PA in different ways.

Reflective, Organized, Analyzed Knowledge

- When teachers possess reflective, organized, and analyzed knowledge, they can examine PA programs and assessments critically, with an eye toward predicting which programs are likely to be successful with different populations of students.

- They might well be involved in a district-wide committee to develop a professional development program for improving PA instruction.

Table 6.2: Changes in teacher knowledge across a career pathway: pragmatics	
Type of Knowledge	**What knowledge about the pragmatic dimensions of language might look like?**
Declarative knowledge	Teachers at this level understand the fundamental form-function relationship in language use—that writers and speakers use the formal tools and features of text to fulfill different functions and achieve different goals (i.e., to inform, to persuade, to entertain). They have a passing acquaintanceship with key terms related to pragmatics—such as discourse, register, genre, textual devices and conventions, voice, style, persona, stance, perspective—but their knowledge is not well-developed or differentiated. They understand the social and cultural functions that texts perform in different contexts (school, work, play, home) and ways in which those contexts shape textual use and interpretation.
Situated, can-do procedural knowledge	Teachers possess at least a few routines for addressing these features of language use, such as Questioning the Author, and teach students about how to use genre and register to achieve particular effects on an audience (e.g., persuasion or entertainment). These lessons would be fairly prescribed and circumscribed--the understandings about text developed therein may or may not be applied to reading and writing activities in other classroom contexts. Teachers may be more skilled at teaching students the meaning of terms, such as genre, voice, and perspective than helping student to apply these understandings to their reading and writing of texts.
Stable procedural knowledge	At this level, the routines have become more or less automatic for the teachers, and they are beginning to be able to adapt to the performance needs of different groups and individuals. Teachers have acquired additional routines for developing students' understandings of the pragmatic dimensions and are beginning to develop approaches for assessing [...]. Their assessments are becoming more fully differentiated, as is instruction. [...] attention to the form/function relationship, may [...] features [...], the connotative loading of [...] attention to the ways that societal [...]
[Adapted] knowledge	[...] specific routines and are better able to [...] pragmatics into students' daily interactions with [...]. The teachers own understanding of these issues and their application to reading and writing has become more sophisticated. Whereas in the declarative stage, teachers understood the meaning of terms such as discourse, register and genre, they are now able to connect these stylistic variations to the pragmatic/social (and political or ideological) functions of text. Teachers at this level can anticipate and respond to obstacles that their students will confront in applying these understandings to their interpretation and composition of texts.
Reflective, organized, analyzed knowledge	At this level, teachers can use their understandings about the pragmatic dimensions of text proactively and in larger contexts. They can evaluate the effectiveness of programs, routines, and activities designed to develop students' understandings about the pragmatic dimensions of text and their ability to apply these understandings to their reading and writing. These teachers may be involved in developing new approaches to teaching pragmatics

Declarative

- Teachers at this level understand the fundamental form-function relationship in language use—that writers and speakers use the formal tools and features of text to fulfill different functions and achieve different goals (i.e., to inform, to persuade, to entertain).

- They have a passing acquaintanceship with key terms related to pragmatics—such as discourse, register, genre, textual devices and conventions, voice, style, persona, stance, perspective—but their knowledge is not well-developed or differentiated.

- They understand the social and cultural functions that texts perform in different contexts (school, work, play, home) and ways in which those contexts shape textual use and interpretation.

Situated Can Do Knowledge

- Teachers possess at least a few routines for addressing these features of language use, such as Questioning the Author, and teach students about how to use genre and register to achieve particular effects on an audience (e.g., persuasion or entertainment). These lessons would be fairly prescribed and circumscribed--the understandings about text developed therein may or may not be applied to reading and writing activities in other classroom contexts.

- Teachers may be more skilled at teaching students the meaning of terms, such as genre, voice, and perspective than helping student to apply these understandings to their reading and writing of texts.

Stable Procedural Knowledge

- At this level, the routines have become more or less automatic for the teachers, and they are beginning to be able to adapt to the performance needs of different groups and individuals. Teachers have acquired additional routines for developing students' understandings of the pragmatic dimensions of text and are beginning to develop approaches for assessing these understandings.

- The teacher's knowledge is becoming increasingly differentiated, as is instruction. Instruction may include more explicit attention to the form/function relationship, may include analysis of more subtle stylistic features (e.g., the connotative loading of words and idioms), and may include increasing attention to the ways that societal forces shape authors and texts

Expert Adaptive Knowledge

- At this level, teachers are less reliant on specific routines and are better able to integrate issues of discourse and pragmatics into students' daily interactions with texts.

- The teachers own understanding of these issues and their application to reading and writing has become more sophisticated. Whereas in the declarative stage, teachers understood the meaning of terms such as discourse, register and genre, they are now able to connect these stylistic variations to the pragmatic/social (and political or ideological) functions of text.

- Teachers at this level can anticipate and respond to obstacles that their students will confront in applying these understandings to their interpretation and composition of texts.

Reflective Organized Analyzed Knowledge

- At this level, teachers can use their understandings about the pragmatic dimensions of text proactively and in larger contexts.

- They can evaluate the effectiveness of programs, routines, and activities designed to develop students' understandings about the pragmatic dimensions of text and their ability to apply these understandings to their reading and writing.

- These teachers may be involved in developing new approaches to teaching pragmatics at the school or district level.

# What areas would we apply this to? For ELA…

- Language
- Literacy (orthography, visual images, layout)
- Learning (including individual differences, diversity, and exceptionality)
- The intersection of the first three
- Assessment
- The context of schooling
- All of the TPEs could be scaled developmentally

For any subject area or special services credential…

Another missing piece?
Do we have a theory of how and why knowledge works its magic on student performance?

- Teacher
  - Knowledge
  - Beliefs
  - Practices

→

- Student
  - Knowledge
  - Beliefs
  - Practices

↓

Student Performance
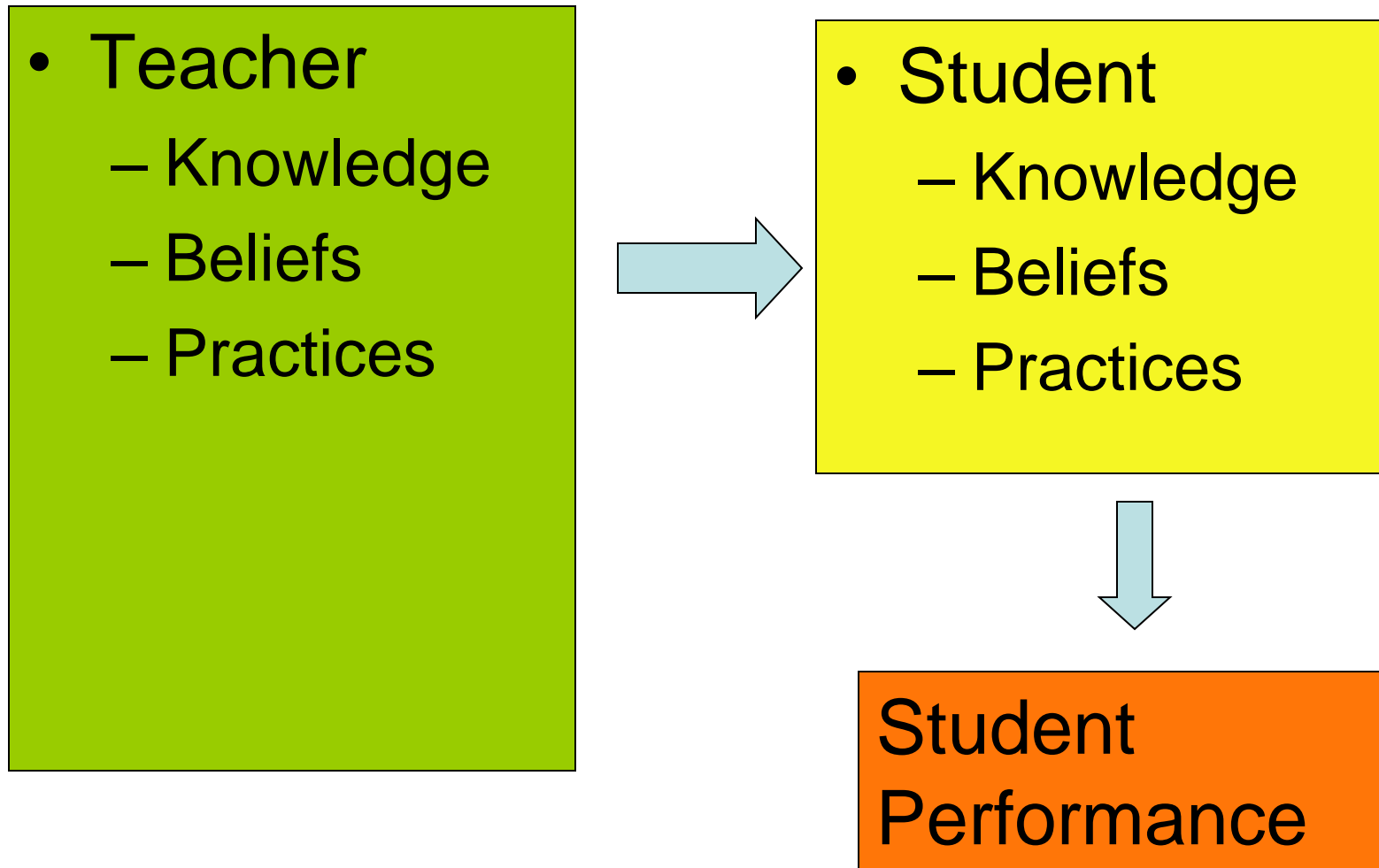
How would we measure it?

- Test
  - Multiple choice
  - Essay
- Observation
  - Live
  - Video
- Defense/reflection of practice
  - Portfolio with reflections
  - Critique the work of others or themselves

Perhaps we need to match asessments to knowledge type

	Test it	Observe it	Defend it
Declarative	√	?	
Situated Procedural	?+	√	
Stable P…		√	?
Expert	?-	?+	√
Reflective	?-	?+	√

√ = yes   ? = not sure   ?+ = probably   ?- = probably not

How would we validate any of the measures of teacher knowledge we selected?

- Criterion-related validity
  - Score predicts future success (predictive validity)
  - Score correlates with some external standard of teacher knowledge (concurrent validity)
- Content validity
  - It looks and feels like what we say we are measuring (face validity)
  - Experts have it (or more of it) but novices don't (or have less of it)
    - Reutzel et al Utah group
    - Phelps et al Michigan

TPA-like systems → New Summative → NBPTS
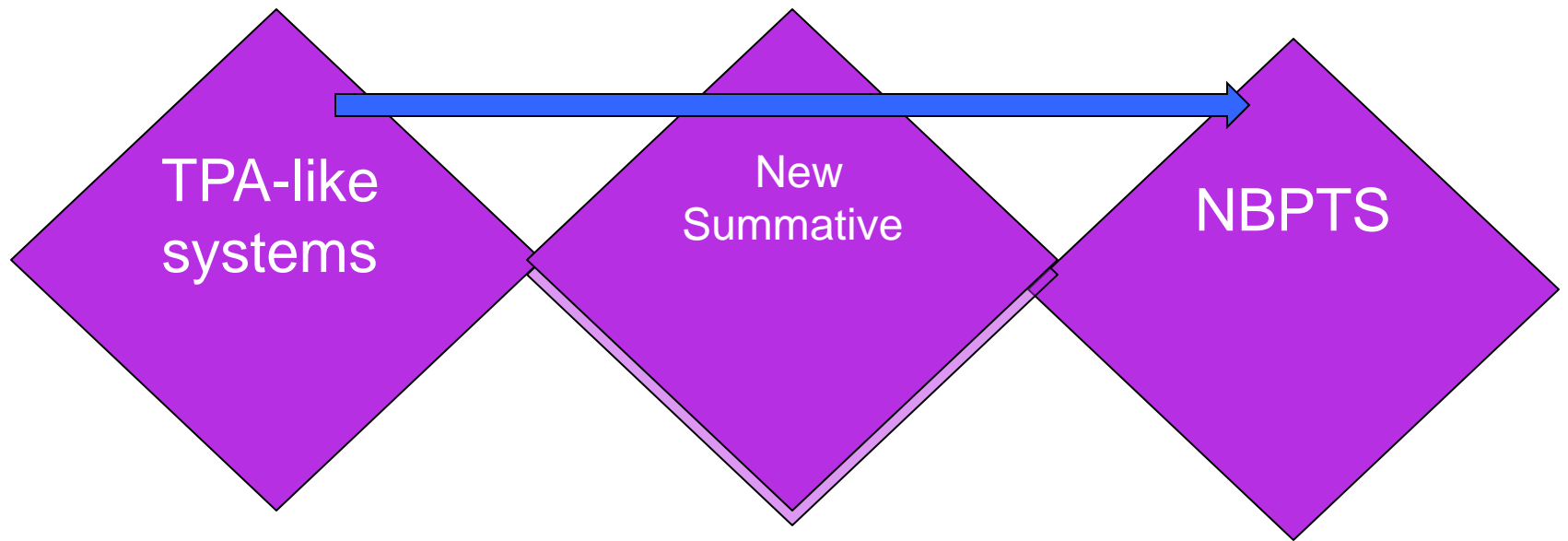
More on validation

- Consequential validity: What happens when teachers either possess it or don't
  - Do they teach better (different set of practices)?
  - Do kids learn more?
    - This is the scary part!!!!

But…

- We'll never know unless we get better at
  - Measuring teacher knowledge
  - Measuring teacher beliefs
  - Measuring teacher practices
- And actually do it as a matter of course
  - At many time points in one's career
- We need to build the expectation in our profession that assessing our knowledge, beliefs and practices is a
  - Good thing: helps us grow
  - A serious professional responsibility

Let's look for a bit in the policy context to see what might shape our capacity to work this magic

Beware the simple view

- Read Comp = Dec * List Comp
- Subject Matter Knowledge + Verbal Ability = Effective Teaching
  - 2003 Report of Secretary of Education
- My view
- It's subject matter, stupid
- It's experience, stupid
- It's professional knowledge, stupid
- It's all three stupid, plus a genuine commitment.

Beware the Market Place View

- Fordham Foundation: Checker Finn
- Marketplace vision: Let a thousand markets bloom (California experiment)
- Invite all comers, weed out the chaff
- Use student performance as the sole criterion for retaining teachers and schools
- Change metaphors for teaching preparation
 - Not the doctor, but the journalist!

Differences between Professional and Market views

- Professional accountability –

- Hold system and teachers accountable for getting & using knowledge about what works
- Ensure access to subject matter and pedagogical knowledge

- Ensure standards before and after hiring through licensing, induction, evaluation, professional development

- Market accountability –

- Let almost anyone teach, then fire teachers who don't produce, close schools that do poorly
- Rely on subject matter knowledge (when convenient) and instincts about teaching
- Look for evidence of quality (based on student test score gains) after hiring

Beware the beguile of alignment

- Should teacher education programs be based on state student performance standards?

- NRP?

- Even NRP authors know that it is not comprehensive

Alignment: The centrality of content standards
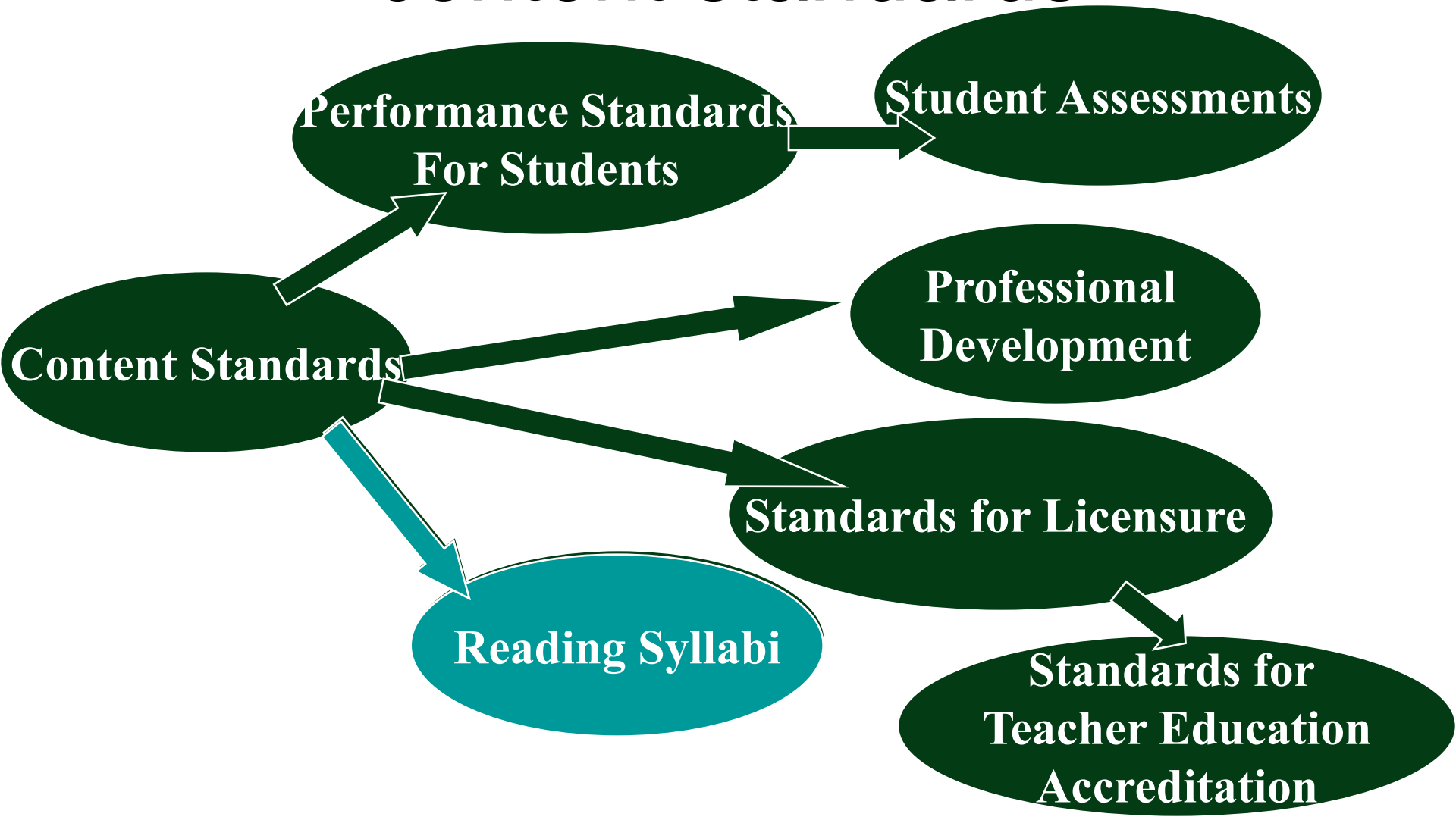
So where can we look for good models?

- Hoffman and Pearson, 2000, search for exemplary models of teacher learning
  - All but one of our exemplary models were professional development
  - PD is where I have learned most of what I know

Pay attention to the research on professional development

- A great irony: We go to great ends to make sure we are attending to the research on kids, and deliver the knowledge base to teachers in a model that often ignores what we know about adult, particularly professional, learning

- Deep and Broad Professional Knowledge is our only hope in meeting children's needs

Research should promote the teacher knowledge required to exercise professional prerogative

- Teachers deserve a full set of assessment and instructional tools to assess the situation and to determine the most appropriate approach for each student

- They should have the knowledge to look for special characteristics that shape instruction

- And the inquiry skills to do trial and error without doing harm

- And the prerogative to make those choices.

- ONE role for research is to determine the knowledge base required to exercise these prerogatives

The other side of prerogative

- If teachers aspire to this sort of prerogative, they MUST accept accountability for their knowledge

- They MUST be prepared to find that their intuitions and hunches and experiences are not enough.

- And that sometimes new evidence trumps old methods and even best practice.

- In short a disposition to inquire and learn

So what do we know about the development of professional knowledge?

Sources

- Broad sweep: The literature on PD broadly construed
- Personal sweep:
  - The work that Barbara Taylor and I did over several years in the CIERA School Change Project
  - Other work that I have been involved in—
  - a 4 year teacher research collaboration in Illinois
  - A 5 year collaboration with Deanna Birdyshaw in a single school in Michigan
  - An IES project on teacher uptake of research-based practices for teaching reading comprehension
  - An undisclosed number of workshops in an undisclosed number of schools…

Why is this an issue?

- No matter the political stance of the reform, Professional Development is seen as the solution

- Long standing tensions between top-down and bottom-up approaches to reform

- Just consider the contrasts...

📖The Assumptions

- Top down (external)

- What schools and teachers need is better ideas to implement

- Knowledge required exists out there and must be imported

- Task: find the knowledge and apply it

- Bottom up (internal)

- What schools and teachers need is a better assessment of current needs

- Knowledge required exists within our setting and must be catalyzed

- Task: reflect on current situation to find the path to a solution

What do we know about the efficacy of top down teacher training?

- Teacher effectiveness movement
  - Find out what effective teachers do
  - Train others to do likewise
  - Evaluate the outcomes
    - Fidelity
    - Student learning
- Some evidence to support this approach
  - NRP--teachers can learn to implement strategy instruction
  - A host of training studies from the 80s and early 90s

When bottom-up is done right, teachers…*

- become confident in their decision-making abilities
- take responsibility for what is happening in their classrooms.
- develop individual autonomy
- are empowered to make deliberate and thoughtful changes in their classrooms.

*Richardson and Anders, 1994

The development of professional knowledge*

- Teachers who are learning are in the process of <u>redefining</u> their teaching practice
- Teacher learning ought to be <u>activated</u> rather than bound and delivered
- Teacher learning flourishes in contexts in which we privilege <u>interactions</u> among teachers
- Teacher learning is more substantial when there is a <u>personal</u>, not just a professional, learning <u>goal</u> involved
- Professional learning communities are the right structure in which these dispositons can be developed

*Wilson & Berne, 2000

The Essence of the Dilemma

- We are pretty sure that some level of external intervention is required because we know that not everyone knows, or can easily learn on their own, what they need to know.

- However, we can be sure that if we hand the knowledge we think teachers need to them on a silver platter, then they may either reject it or, even worse, engage in mock compliance.

So how do we achieve a balance between bottom up and top down approaches?

Embed bottom up principles within top down frameworks

- Within externally imposed frameworks, offer opportunities for teachers to develop the elements often missing in TD

- Voluntary choice to promote ownership
  - Different pathways and special topics

- Individual contributions to the collective effort
  - Special areas of expertise, materials, techniques
  - Building local capacity

- Situated practice
  - Immediate tryout in classrooms
  - Double edged sword, depending on success

Embed top down principles within that <u>longer term goal</u> of bottom up professional development

- Establish a broad framework, one that outlines the expertise to be developed, in a professional development program, but allow considerable flexibility in how one gets to the goals
  - **Reading Recovery**
  - **National Writing Project** in the U.S.
  - **CIERA School Change**
  - **Lesson Study**

Principles of Effective Professional Learning Programs

1. programs addressing the beliefs that teachers bring with them about teaching are more likely to foster openness to new ideas and reflection on personal assumptions;

2. programs that foster the expectation of and skills required for continuous learning are more likely to support the development of career learning paths;

3. programs that ensure the development of a comprehensive and usable knowledge base are more likely to sustain successful initial teaching experiences;

4. programs that help teachers apply what they have learned in teacher education programs to particular contexts and students ease the transition to classroom teaching;

More principles

5. programs that promote articulation among standards, coursework, and internship experiences are more likely to help teachers develop a sense of personal efficacy and professional responsibility;

6. programs that stay the course are more likely to succeed than those that change foci frequently;

7. programs that are sensitive to local context are more likely to succeed than generic approaches;

8. programs that encourage careful analyses of teaching and the generation of shared knowledge are more likely to nurture a sense of collective responsibility for instruction; and

9. programs that achieve a balance between school/program needs and the needs of individual teachers are more likely to support teachers' movement along the developmental continuum toward becoming adaptive experts.

A set of lessons I have learned in all of this for making PD work

Lesson 1: Levels of Independence

- Like students, we all operate at different levels of independence, depending on the topic and our experience
  - Frustration level
  - Instructional level
  - Independent level
- Determines the support and scaffolding you provide

Building a School-wide Assessment System…

- In our work in Michigan, after 2 years, we were at
  - Independent level: Writing Assessment
  - Instructional level: Spelling Assessment
  - Frustration level: Reading Assessment

- In our work in Michigan, after 4 years, we were at
  - Independent level: Writing Assessment Spelling Assessment
  - Instructional level: Reading Assessment
  - Frustration level: Listening Assessment

Lesson 2: Learning to Work from our Strengths

- When is it best to have PD prepared by
  - A fellow teacher
  - An administrator
  - An external presenter
- What roles do different folks play in the process
  - Who represents the staff?
  - Who are the intellectual gophers?
  - Who provides the support to make things happen in classrooms?
- Build an advisory structure in which everyone is represented -- no other choice, really…
- Use that structure to facilitate communication, planning, delivery, and follow up

Lesson #3: PD has to be situated

- Internal agenda setting and responsibility
- Ownership--embedded in their needs (e.g., writing, spelling-phonics, then reading)
  - Project impact at UCB
- Taking time
  - rhythm and pace
- Honor local commitment

Situated PD, cont

- Tension/dissonance between familiar and unfamiliar in our meetings (don't require everyone to be in the same place at the same time)
  - comfort level
  - collegiality
  - conceptual seepage
- Mentoring new faculty
  - Happened as a matter of course in the collaboratives
  - Assessment is more of a cultural practice (part of everyday life) than an isolated event or entity.

Lesson #4: There are many kinds of leadership--all are important

- Administrative leadership at the school level
- Internal leadership of the core team (can represent the pulse of the school) and communication--a kind of intimate collegiality
- External leadership
  - support the effort
  - provide resources, including time
  - show up to help with the work
  - defend the effort to the skeptics

Lesson #5: People play different roles in different stages of the work

- Flexibility in roles and responsibilities
- Changing teacher leadership from
  - Writing
  - Spelling
  - Reading Comprehension
- Building local internal capacity is crucial

Lesson # 6: Community of Learners

- Evolves over time
- Based upon ever increasing engagement of the players
- Grounded in activity and in the tools we were building
- It must become part of the landscape, the culture of improvement, a learning organization

My conclusion

- We may be forced to take teacher knowledge more seriously than we ever have
- We need to get the assessments right, and I'm opting for matching formats to levels of expertise
- We should investigate, very cautiously, tying teacher knowledge and practice to student performance…BUT
  - We may want to monitor it at the school level, not the individual level (collective knowledge)
  - We need student assessments we can trust and aspire to

So what does this mean for our work in initial credentialing?

- We have a lot to learn from our successes in
  - professional development and,
- We must, we absolutely must, take the professional high road

Preparation for future work: Developing Professional DISPOSITIONS

- Getting our pre-service students off to a running start
  - Work in professional learning communities
  - Bring special expertise to the table
  - Support fellow learners
  - Make consequential decisions
    - Make "little" decisions under lots of guidance, e.g.
      - Differentiate instruction among learners
      - Scripted curricula won't get us there'

A final word on our mission in life

- Keep our eye on the prize
- Teacher Education is a means to an end--increased knowledge and teaching skill
- Better teaching skills enable
    - Increased student achievement, but… it is useful only because it indexes
        - Increased opportunity to a world of learning that is useful only to the degree that it
            - Improves the quality of life you can lead. That is the prize: Options and opportunities!